

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
22 September 2005 (22.09.2005)

PCT

(10) International Publication Number
WO 2005/086597 A2

(51) International Patent Classification: Not classified

(21) International Application Number:
PCT/JP2005/004870 /

(22) International Filing Date: 14 March 2005 (14.03.2005) /

(25) Filing Language: English /

(26) Publication Language: English /

(30) Priority Data:
2004-071514 / 12 March 2004 (12.03.2004) / JP
2004-341136 / 25 November 2004 (25.11.2004) / JP

(71) Applicant (for all designated States except US): MATSUSHITA ELECTRIC WORKS, LTD. [JP/JP]; 1048, Oaza-Kadoma, Kadoma-shi, Osaka, 5718686 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): TSUJI, Koji

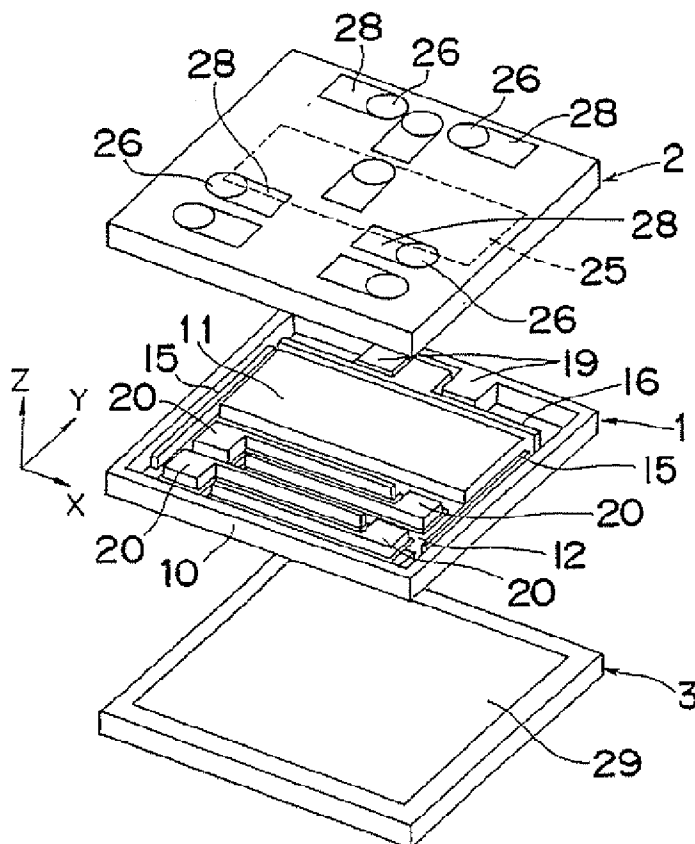
[JP/JP]; c/o MATSUSHITA ELECTRIC WORKS, LTD., 1048, Oaza-Kadoma, Kadoma-shi, Osaka, 5718686 (JP). GOUDA, Kazuo [JP/JP]; c/o MATSUSHITA ELECTRIC WORKS, LTD., 1048, Oaza-Kadoma, Kadoma-shi, Osaka, 5718686 (JP). KIRIHARA, Masao [JP/JP]; c/o MATSUSHITA ELECTRIC WORKS, LTD., 1048, Oaza-Kadoma, Kadoma-shi, Osaka, 5718686 (JP). NISHIJIMA, Youichi [JP/JP]; c/o MATSUSHITA ELECTRIC WORKS, LTD., 1048, Oaza-Kadoma, Kadoma-shi, Osaka, 5718686 (JP). HYODO, Satoshi [JP/JP]; c/o MATSUSHITA ELECTRIC WORKS, LTD., 1048, Oaza-Kadoma, Kadoma-shi, Osaka, 5718686 (JP).

(74) Agents: KAWAMIYA, Osamu et al.; AOYAMA & PARTNERS, IMP Building, 3-7, Shiromi 1-chome, Chuo-ku, Osaka-shi, Osaka, 5400001 (JP).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BE, BG, BR, BW, BY, BZ, CA, CH, CN,

[Continued on next page]

(54) Title: GYRO SENSOR AND SENSOR APPARATUS USING SAME /



(57) Abstract: Disclosed is a gyro sensor, which comprises a primary base plate (1) and a support base plate (2) which are superimposed on one another. The primary base plate (1) is provided with a driven mass body (11) to be driven in such a manner as to be vibrated in a direction intersecting with a surface of the support base plate (2), and a detection mass body (12) coupled with the driven mass body (11) through a drive spring (13) and adapted to be displaceable in a plane along the support base plate (2). Two detection springs (15) extending in the arranging direction of the driven mass body (11) and the detection mass body (12) are connected, respectively.



CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

(84) **Designated States** (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SI, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.